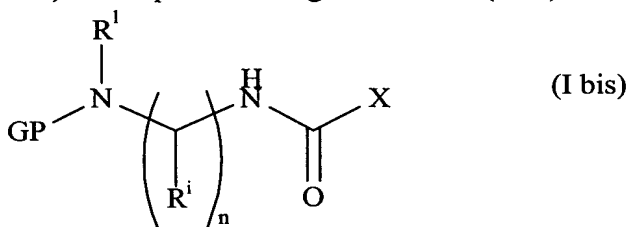


**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

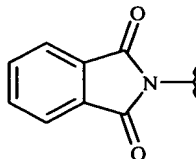
**54. (currently amended)** A compound having the formula (I bis)



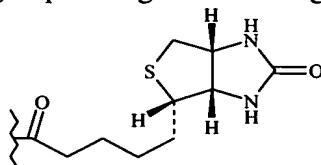
wherein

- "n" is ~~a whole number comprised from 1 to 50~~ 1 or 2,
- "i" is a whole number varying from 2 to n+1,
- GP is selected from the group consisting of:
  - ~~\* a protective group selected from:~~
    - an oxycarbonyl group ROCO, R representing an alkyl group of 1 to 20 carbon atoms, unsubstituted or substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,
    - an acyl group RCO, R being chosen from: an alkyl group of 1 to 20 carbon atoms or an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being possibly substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,
  - ~~an alkyl group,~~
  - ~~an aryl group,~~
  - ~~a group of formula CONHR, R being such as defined above,~~

~~—a phthalimido group (with  $R^+ = \emptyset$ ) GP along with  $R^1$  and the N then are bonded to form a phthalimido group of formula:~~



~~— a biotinyle group having the following formula~~



~~— $O_2$  (with  $R^+ = \emptyset$ ),~~

— groups  $R^1$  and  $R^i$  can each represent independently from each other: a hydrogen, a halogen, the protected or unprotected side chain of an amino acid selected from natural and synthetic amino acids, a  $(C_1-C_{20})$  alkyl group, unsubstituted or substituted, an aryl group whose cyclic structure contains 5 to 20 carbon atoms, a group  $OR_a$ ,  $-NH_2$ ,  $-OH$ ,  $-COOR_a$ ,  $-CONHR_a$ ,  $-CONH_2$ ,  $-CH_2COOR_a$ ,  $-CH_2CONHR_a$ ,  $-CH_2CONH_2$ ,

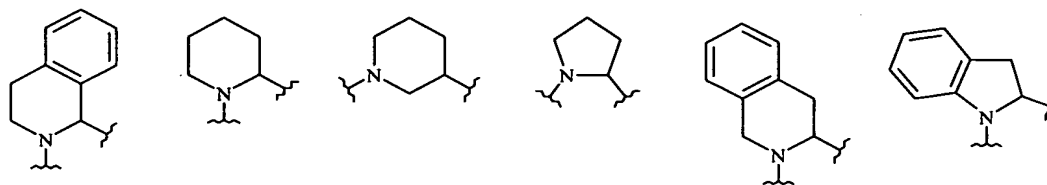
$R_a$  representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms,

~~— $R^+$  and  $R^i$  groups can also form a cycle on the basis of intramolecular cyclisations which are as follows:~~

~~1/—cyclization between  $R^i$  and  $R^{i+ke}$ , where  $ke$  is a whole positive number,~~

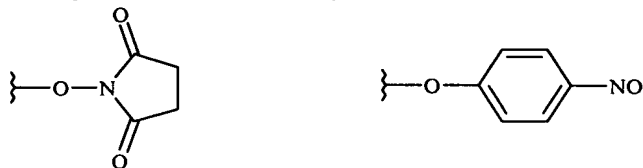
~~2/—cyclization between  $R^+$  and  $R^i$  with preferably  $i = 2, 3$  or  $4$ ,~~

— wherein  $R^1$  and  $R^i$  groups can also form a cycle with N, said cycle being selected from the group consisting of



– X group represents a ~~group conferring on the compound of formula (I bis) a structure of an activated derivative of carbamic acid, wherein said X group is derived from a compound selected from phenols, optionally substituted with at least one nitro or at least one halogen, or from hydroxylamine derivatives, imidazole and tetrazole, derived from N-hydroxysuccinimide or p-nitrophenol,~~

said X group having one of the following formula:



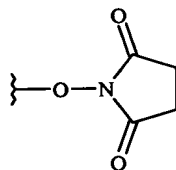
wherein said compound is not one of the following compounds selected from the group consisting of:

- n=2, GP=Boc, R<sup>1</sup>=isobutyl, R<sup>2</sup>=R<sup>3</sup>=H, X=4-nitrophenol;
- n=2, GP=Boc, R<sup>1</sup>=benzyl, R<sup>2</sup>=R<sup>3</sup>=H, X=4-nitrophenol;
- n=2, GP=Boc, R<sup>1</sup>=CH<sub>2</sub>-p-C<sub>6</sub>H<sub>4</sub>Or-Bu, R<sup>2</sup>=R<sup>3</sup>=H, X=4-nitrophenol;
- n=2, GP=Boc, R<sup>1</sup>=H, R<sup>2</sup>=R<sup>3</sup>=H, X=4-nitrophenol.

55. (previously presented) The compound according to claim 54, wherein GP represents an oxycarbonyl group chosen from Boc, Fmoc, benzyloxycarbonyl or allyloxycarbonyl.

56-59. (canceled)

60. (currently amended) The compound according to claim 54, in which X is ~~derived from~~ a N-hydroxysuccinimide group and has the following formula:

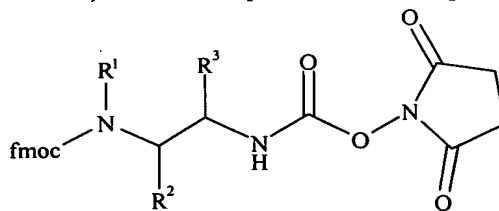


61. (previously presented) The compound according to claim 54, wherein the alkyl group corresponding to  $R^1$  or  $R^i$  is substituted with one or several substituents selected from the group consisting of  $-\text{COOR}_h$ ,  $-\text{CONHR}_h$ ,  $-\text{COOH}$ ,  $-\text{OH}$ ,  $-\text{OR}_h$ ,  $-\text{NHR}_h$ ,  $-\text{NH}_2$ ,  $-\text{NH}(\text{CO})\text{R}_h$ , an aryl group whose cyclic structure contains 5 to 20 carbon atoms, halogen, carbonyl, nitrile, and guanidino,

$R_h$  representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms.

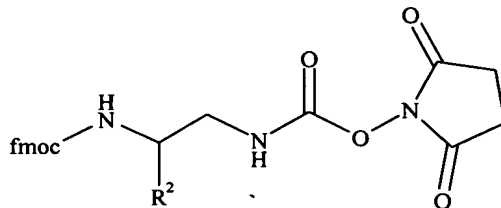
62-63. (canceled)

64. (currently amended) The compound according to claim 54, having the following formula



wherein  $R^2$  represents a ( $\text{C}_1\text{-C}_{20}$ ) alkyl group, optionally substituted with a phenyl group, and wherein said phenyl group is optionally substituted with an alkoxy group.

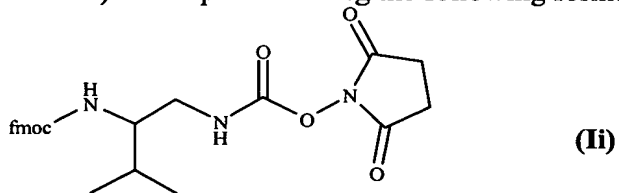
65. (currently amended) The compound according to claim 54, having the following formula:



wherein R<sup>2</sup> represents a (C<sub>1</sub>-C<sub>20</sub>) alkyl group, optionally substituted with a phenyl group, and wherein said phenyl group is optionally substituted with an alkoxy group.

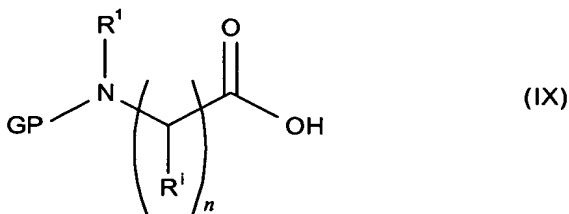
66. (canceled)

67. (previously presented) A compound having the following formula:

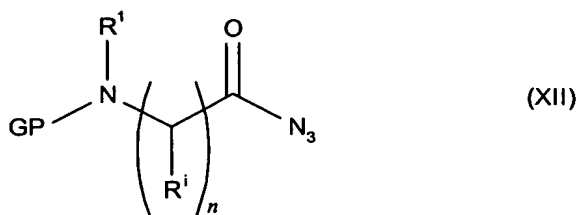


68. (previously presented) A process for preparing a compound according to claim 54, comprising:

providing a compound of formula (IX)



transforming said compound (IX) into a corresponding acyl azide (XII)



transforming said acyl azide (XII) by Curtius rearrangement into a corresponding isocyanate (II),

treating said isocyanate (II) under conditions that provide a carbamic acid compound of formula (I bis).

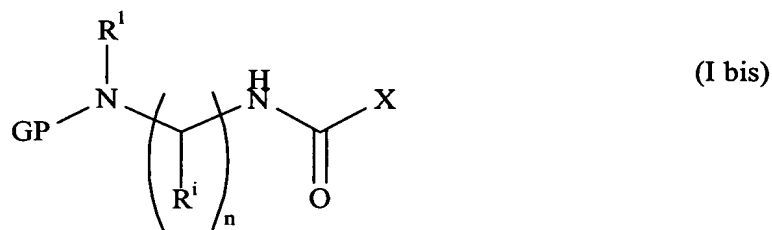
**69. (currently amended)** The process according to claim 68, wherein transforming said compound (IX) into a corresponding acyl azide (XII) is carried out by treatment of a mixed anhydride, formed by the reaction of acid compound (IX) with ethyl or isobutyl chloroformate in the presence of a tertiary amine, wherein said tertiary amine is NMM (N-methylmorpholine), DIEA (di-isopropylethylamine), or Et<sub>3</sub>N in THF (tetrahydrofuran) with a sodium azide solution,

wherein said step of transforming acyl azide (XII) into a corresponding isocyanate (II), is carried out by heating a solution of acyl azide in a solvent, and

wherein a compound selected from the group consisting of N-hydroxysuccinimide, phenol, pentafluorophenol, pentachlorophenol or p-nitrophenol, 2,4-dinitrophenol, 2,4,5-trichlorophenol, 2,4-dichloro-6-nitrophenol, hydroxy-1,2,3-benzotriazole, imidazole, tetrazole, 1-oxo-2-hydroxydihydrobenzo-triazine (HODhbt), 7-aza-1-hydroxybenzotriazole (HOAt) and 4-aza-1-hydroxybenzo-triazole (4-HOAt), is the compound treating isocyanate (II) to obtain a carbamic acid derivative of formula (I bis).

**70-72. canceled**

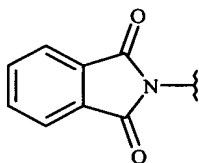
73. (new) A compound having the formula (I bis)



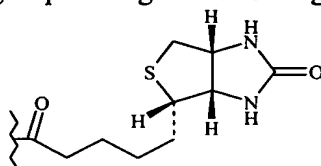
wherein

- "n" is 1 or 2,
- "i" is a whole number varying from 2 to n+1,
- GP is selected from the group consisting of:
  - an oxycarbonyl group ROCO, R representing an alkyl group of 1 to 20 carbon atoms, unsubstituted or substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,
  - an acyl group RCO, R being chosen from: an alkyl group of 1 to 20 carbon atoms or an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being possibly substituted with an aryl group whose cyclic structure contains 5 to 20 carbon atoms, said alkyl group being saturated or not,

GP along with R<sup>1</sup> and the N then are bonded to form a phthalimido group of formula:



• a biotinyle group having the following formula

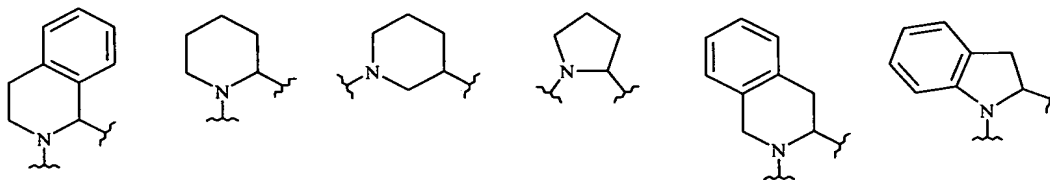


- groups R<sup>1</sup> and R<sup>i</sup> can each represent independently from each other: a hydrogen, a halogen, the protected or unprotected side chain of an amino acid selected from natural and synthetic amino acids, a (C<sub>1</sub>-C<sub>20</sub>) alkyl group, unsubstituted or substituted, an aryl group

whose cyclic structure contains 5 to 20 carbon atoms, a group  $\text{OR}_a$ ,  $-\text{NH}_2$ ,  $-\text{OH}$ ,  $-\text{COOR}_a$ ,  $-\text{CONHR}_a$ ,  $-\text{CONH}_2$ ,  $-\text{CH}_2\text{COOR}_a$ ,  $-\text{CH}_2\text{CONHR}_a$ ,  $-\text{CH}_2\text{CONH}_2$ ,

$R_a$  representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms,

— wherein  $R^1$  and  $R^i$  groups can also form a cycle with N, said cycle being selected from the group consisting of



— X group represents O-succinimidyl or p-nitrophenol,

wherein said compound is not one of the following compounds selected from the group consisting of:

- $n=2$ ,  $\text{GP}=\text{Boc}$ ,  $R^1=\text{isobutyl}$ ,  $R^2=R^3=\text{H}$ ,  $\text{X}=4\text{-nitrophenol}$ ;
- $n=2$ ,  $\text{GP}=\text{Boc}$ ,  $R^1=\text{benzyl}$ ,  $R^2=R^3=\text{H}$ ,  $\text{X}=4\text{-nitrophenol}$ ;
- $n=2$ ,  $\text{GP}=\text{Boc}$ ,  $R^1=\text{CH}_2\text{-p-C}_6\text{H}_4\text{O}t\text{-Bu}$ ,  $R^2=R^3=\text{H}$ ,  $\text{X}=4\text{-nitrophenol}$ ;
- $n=2$ ,  $\text{GP}=\text{Boc}$ ,  $R^1=\text{H}$ ,  $R^2=R^3=\text{H}$ ,  $\text{X}=4\text{-nitrophenol}$ .

74. (new) The compound according to claim 73, wherein GP represents an oxycarbonyl group chosen from Boc, Fmoc, benzyloxycarbonyl or allyloxycarbonyl.

75. (new) The compound according to claim 73, wherein X is a O-succinimidyl.

76. (new) The compound according to claim 73, wherein the alkyl group corresponding to  $R^1$  or  $R^i$  is substituted with one or several substituents selected from the group consisting of  $-\text{COOR}_h$ ,  $-\text{CONHR}_h$ ,  $-\text{COOH}$ ,  $-\text{OH}$ ,  $-\text{OR}_h$ ,  $-\text{NHR}_h$ ,  $-\text{NH}_2$ ,



-NH(CO)R<sub>h</sub>, an aryl group whose cyclic structure contains 5 to 20 carbon atoms, halogen, carbonyl, nitrile, and guanidino,

R<sub>h</sub> representing an alkyl group, saturated or not, having 1 to 20 carbon atoms, an aralkyl group having 1 to 20 carbon atoms, or an aryl group whose cyclic structure contains 5 to 20 carbon atoms.